

**What is claimed is:**

1. A lie-down massager, comprising:
  - a) a base frame having an elongated top panel,  
wherein an elongated top opening is formed  
centrally and lengthwisely through the  
elongated top panel;
  - b) a rider provided below the elongated top panel  
of the base frame to make a horizontally  
reciprocal movement relative to the base frame;
  - c) a lifter liftedly engaged to the rider to make  
a vertically reciprocal movement relative to  
the rider;
  - d) a massage member fixed downwardly to the lifter,  
wherein first and second supports are  
horizontally aligned along a top portion of the  
massage member;
  - e) means for allowing the first and second  
supports to repeatedly approach to and distance  
from each other within the elongated opening;
  - f) massage bumps attached atop the first and  
second supports; and
  - g) a pad covering the massage bumps and the  
elongated opening of the base frame.

2. The lie-down massager of claim 1 wherein the means comprises:
- a) a gear shaft rotatably engaged to the massage member and partitioned to first and second halves respectively threaded symmetrical to each other such that the first support carried on the first half either approaches to or distances from the second support carried on the second half of the gear shaft in accordance with a rotating direction of the gear shaft; and
- b) a first motor connected to the gear shaft to control the rotation of the gear shaft.
3. The lie-down massager of claim 2 wherein the first and second supports repeatedly approach to and distance from each other in perpendicular to the horizontally reciprocal movement of the rider.
4. The lie-down massager of claim 1 wherein the vertical reciprocation of the lifter is implemented by a gear-motor application.

5. The lie-down massager of claim 1 wherein the vertical reciprocation of the lifter is implemented by a gear-chain mechanism powered by a second motor.
- 5 6. The lie-down massager of claim 1 wherein the vertical reciprocation of the lifter is implemented by a cam-motor application.
7. The lie-down massager of claim 1 wherein the message  
10 bumps are each formed in hemisphere.
8. The lie-down massager of claim 1 wherein the message bumps are partitioned to first and second pairs, wherein the first pair message bumps are formed atop  
15 the first support and the second pair message bumps are formed atop the second support, wherein said each pair bumps are aligned parallel to the direction of the rider reciprocation.
- 20 9. The lie-down massager of claim 1 wherein the message bumps each include a heater, wherein the heater is a heating lamp generating heat and infrared rays.

10. The lie-down massager of claim 1 further comprising a heating member spread in the top panel of the base frame.

5 11. A lie-down massager, comprising:

- a) a base frame having an elongated top panel, wherein an elongated top opening is formed centrally and lengthwisely through the elongated top panel;
- 10 b) a rider provided below the elongated top panel;
- c) a pair of pulleys linked by a rope and respectively mounted in a front end portion and a rear end portion of the base frame, wherein a predetermined portion of the rope is fixedly  
15 attached to the rider so that the pulley rotation enables the rider to generate a horizontally reciprocal movement along the elongated top opening;
- d) a lifter liftedly engaged to the rider to make  
20 a vertically reciprocal movement relative to the rider;
- e) a massage member fixed downwardly to the lifter, wherein first and second supports are horizontally aligned along a top portion of the  
25 massage member;

- f) means for allowing the first and second supports to repeatedly approach to and distance from each other within the elongated opening;
- g) massage bumps attached atop the first and second supports; and
- h) a pad covering the massage bumps and the elongated opening of the base frame.

12. The lie-down massager of claim 11 further comprising:

- a) a pair of roller coasters parallel to each other and attached to the base frame, wherein the roller coasters each have a substantially waved top surface; and
- b) a coasting member liftedly engaged between the lifter and the rider, wherein a coaster guide roller is formed outwardly extending from each side surface of the coasting member, wherein the coaster guide roller enables the coasting member to make a roller coasting movement on and along the waved top surfaces of the roller coasters.

13. The lie-down massager of claim 12 further comprises:

- a) elongated guides downwardly extending from the coasting member; and
- b) guide bushes upwardly formed on the rider to  
5 releasably receive the elongated guides so as  
to stabilize the roller coasting movement of  
the coasting member along the roller coasters  
and the lifting of the coasting member from the  
rider.

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14. The lie-down massager of claim 11 wherein the means comprises:

- a) a gear shaft rotatably engaged to the massage  
member and partitioned to first and second  
15 halves respectively threaded symmetrical to  
each other such that the first support carried  
on the first half either approaches to or  
distances from the second support carried on  
the second half of the gear shaft in accordance  
20 with a rotating direction of the gear shaft;  
and
- b) a first motor connected to the gear shaft to  
control the rotation of the gear shaft.

15. The lie-down massager of claim 11 further comprises  
rider guide rollers on each side of the rider,  
wherein the rider guide rollers are rollably engaged  
in the base frame to guide the horizontally  
5 reciprocal movement of the rider.

16. The lie-down massager of claim 11 wherein the waved  
top surfaces of the roller coasters each  
substantially form a curvature of a human spinal  
10 cord.

17. The lie-down massager of claim 11 wherein the first  
and second supports repeatedly approach to and  
distance from each other in perpendicular to the  
15 horizontally reciprocal movement of the rider.

18. The lie-down massager of claim 11 wherein the  
vertical reciprocation of the lifter is implemented  
by a gear-motor application..  
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19. The lie-down massager of claim 11 wherein the  
vertical reciprocation of the lifter is implemented  
by a gear-chain mechanism powered by a second motor.

20. The lie-down massager of claim 11 wherein the vertical reciprocation of the lifter is implemented by a cam-motor application.

5 21. The lie-down massager of claim 11 wherein the message bumps are each formed in hemisphere.

22. The lie-down massager of claim 11 wherein the message bumps are partitioned to first and second  
10 pairs, wherein the first pair message bumps are formed atop the first support and the second pair message bumps are formed atop the second support, wherein said each pair bumps are aligned parallel to the direction of the rider reciprocation.

15 23. The lie-down massager of claim 11 wherein the message bumps each include a heater, wherein the heater is a heating lamp generating heat and infrared rays.

20 24. The lie-down massager of claim 11 further comprising a heating member spread in the top panel of the base frame.

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25. A lie-down massager, comprising:

- a) a base frame having an elongated top panel,  
wherein an elongated opening is formed  
centrally and lengthwisely through the  
5 elongated top panel;
- b) a pair of rack gears parallel to each other and  
provided below the elongated top panel;
- c) a rider having a roller gear perpendicular to  
the rack gears, wherein the roller gear is  
10 rotatably mounted on the rack gears to allow  
the rider to make a horizontally reciprocal  
movement along the rack gears, wherein the  
rider is maintained below the elongated top  
panel;
- 15 d) a lifter liftedly engaged to the rider to make  
a vertically reciprocal movement relative to  
the rider;
- e) a massage member fixed downwardly to the lifter,  
wherein first and second supports are  
20 horizontally aligned along a top portion of the  
massage member;
- f) means for allowing the first and second  
supports to repeatedly approach to and distance  
from each other within the elongated opening;

- g) message bumps attached atop the first and second supports; and
- h) a pad covering the message bumps and the elongated opening of the base frame.

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26. The lie-down massager of claim 25 further comprising:

- a) a pair of roller coasters parallel to each other and attached to the base frame, wherein the roller coasters each have a substantially  
10 waved top surface; and
- b) a coasting member liftedly engaged between the lifter and the rider, wherein a coaster guide roller is formed outwardly extending from each  
15 side surface of the coasting member, wherein the coaster guide roller enables the coasting member to make a roller coasting movement on and along the waved top surfaces of the roller coasters.

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27. The lie-down massager of claim 26 further comprises:

- a) elongated guides downwardly extending from the coasting member; and
- b) guide bushes upwardly formed on the rider to  
25 releasably receive the elongated guides so as

to stabilize the roller coasting movement of  
the coasting member along the roller coasters  
and the lifting of the coasting member from the  
rider.

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28. The lie-down massager of claim 25 wherein the means  
comprises:

- a) a gear shaft rotatably engaged to the massage  
member and partitioned to first and second  
10 halves respectively threaded symmetrical to  
each other such that the first support carried  
on the first half either approaches to or  
distances from the second support carried on  
the second half of the gear shaft in accordance  
15 with a rotating direction of the gear shaft;  
and  
b) a first motor connected to the gear shaft to  
control the rotation of the gear shaft.

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29. The lie-down massager of claim 25 further comprises  
rider guide rollers on each side of the rider,  
wherein the rider guide rollers are rollably engaged  
in the base frame to guide the horizontally  
25 reciprocal movement of the rider.

30. The lie-down massager of claim 25 wherein the waved  
top surfaces of the roller coasters each  
substantially form a curvature of a human spinal  
5 cord.

31. The lie-down massager of claim 25 wherein the first  
and second supports repeatedly approach to and  
distance from each other in perpendicular to the  
10 horizontally reciprocal movement of the rider.

32. The lie-down massager of claim 25 wherein the  
vertical reciprocation of the lifter is implemented  
by a gear-motor application..  
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33. The lie-down massager of claim 25 wherein the  
vertical reciprocation of the lifter is implemented  
by a gear-chain mechanism powered by a second motor.

20 34. The lie-down massager of claim 25 wherein the  
vertical reciprocation of the lifter is implemented  
by a cam-motor application.

35. The lie-down massager of claim 25 wherein the  
25 massage bumps are each formed in hemisphere.

36. The lie-down massager of claim 25 wherein the  
message bumps are partitioned to first and second  
pairs, wherein the first pair message bumps are  
5 formed atop the first support and the second pair  
message bumps are formed atop the second support,  
wherein said each pair bumps are aligned parallel to  
the direction of the rider reciprocation.
- 10 37. The lie-down massager of claim 25 wherein the  
message bumps each include a heater, wherein the  
heater is a heating lamp generating heat and  
infrared rays.
- 15 38. The lie-down massager of claim 25 further comprising  
a heating member spread in the top panel of the base  
frame.